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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EMC CORPORATION 6801 KOLL CENTER PARKWAY PLEASANTON, CA 94566			EXAMINER REZA, MOHAMMAD W	
			ART UNIT 2136	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/821,826	Applicant(s) HERMAN, BARRY STEVEN	
	Examiner Mohammad W. Reza	Art Unit 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claims 17-20 is rejected under 35 U.S.C. 101 because the claim invention is directed to non-statutory subject matter. According to the specification of the invention (Page 1-15) "**a computer program product**" is reasonably interpreted by one of ordinary skill as just software, it is a system of software, per se. In this claim the function of the program is just software not any hardware. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure **stored** on a

computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure **stored in memory** held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. Similarly, computer programs claimed as computer instructions per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. So, it does not appear that a claim reciting software with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banes et al hereafter Banes (US patent application 20030182584) in view of Angelo et al hereafter Angelo (US Patent 6370649).

4. As per claim 1, Banes discloses a method comprising: generating an encrypted backdoor key; providing the backdoor key to the computer program (paragraphs, 0010-0011); and resetting the key to a default value if the backdoor key matches the computed value (paragraphs, 0012, 0023-0024). Although, Banes discloses about resetting the password to default after comparing the current value, he does not explicitly disclose that comparing the backdoor key to a computed value. However, in the same field of endeavor, Angelo discloses comparing the backdoor key to a computed value (col. 2, lines 1-19, col. 1, lines 54-64).

Accordingly, it would be obvious to one of ordinary skill in the network security art at the time of invention was made to have incorporated Angelo's teachings of method and apparatus for comparing the key with the computed value with the teachings of Banes, for the purpose of suitably using the backdoor password to reset to a default value (col. 2, lines 1-19).

5. As per claim 2, Banes discloses a method wherein the encrypted backdoor key is generated using selected factors including at least one of a timestamp, or an identifier associated with the computer program (paragraphs, 0033).

6. As per claim 3, Banes discloses the method wherein the identifier is associated with a computer on which the computer program executes (paragraphs, 0047).

7. As per claim 4, Banes discloses the method wherein the identifier is selected from the group comprising: license number of the computer program, IP address of the computer, CPU identification number of the computer, and an identifier associated with a hardware configuration of the computer (paragraphs, 0036).

8. As per claim 5, Banes discloses the method wherein the timestamp represents a future time (paragraphs, 0047).

9. As per claim 6, Banes discloses the method wherein the selected factors include a random seed (paragraph, 0043).

10. As per claim 7, Banes discloses the method wherein the random seed comprises a timestamp (paragraphs, 0036).

11. As per claim 8, Banes does not disclose the method wherein generating the encrypted backdoor key includes performing a 1-way function on the selected factors. However, Angelo discloses generating the encrypted backdoor key includes performing a 1-way function on the selected factors (col. 6, lines 28-44).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 8.

12. As per claim 9, and 10 Banes does not disclose the method wherein the 1-way function includes Secure Hash Algorithm, generating the computed value using the 1-

way function and the selected factors. However, Angelo discloses wherein the 1-way function includes Secure Hash Algorithm, generating the computed value using the 1-way function and the selected factors (col. 6, lines 28-44).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 9, and 10.

13. As per claim 11, Banes discloses the method wherein resetting the key includes instructing a database system to reset the key to the default value (paragraphs, 0047).

14. As per claim 12, Banes discloses a system: receive a backdoor key (paragraphs, 0010-0011); and resetting the key to a default value if the backdoor key matches the computed value (paragraphs, 0012, 0023-0024). Although, Banes discloses about resetting the password to default after comparing the current value, he does not explicitly disclose that comparing the backdoor key to a computed value. However, in the same field of endeavor, Angelo discloses comparing the backdoor key to a computed value (col. 2, lines 1-19, col. 1, lines 54-64).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 12.

15. As per claim 13, Banes discloses the system a remote computer configured to generate the backdoor key (paragraphs, 0047).

16. As per claim 14, Banes discloses the system wherein the computer is configured to generate the computed value (paragraphs, 0036).

17. As per claim 15, Banes discloses the system wherein the key is associated with an administrator account for accessing the computer program (paragraphs, 0047).

18. As per claim 16, Banes discloses the system wherein the computer program executes on the computer.

19. As per claim 17, Banes discloses a computer program product comprising: receiving a backdoor key (paragraphs, 0010-0011); and resetting the key to a default value if the backdoor key matches the computed value (paragraphs, 0012, 0023-0024). Although, Banes discloses about resetting the password to default after comparing the current value, he does not explicitly disclose that comparing the backdoor key to a computed value. However, in the same field of endeavor, Angelo discloses comparing the backdoor key to a computed value (col. 2, lines 1-19, col. 1, lines 54-64).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 17.

20. As per claim 18, Banes discloses a computer program product comprising: a database system configured to store the key, and wherein resetting the key includes instructing the database system to reset the key (paragraphs, 0012, 0023-0024).

21. As per claim 19, Banes does not disclose a computer program product comprising: for generating the computed value by applying a 1-way function to at least one of a timestamp, an identifier associated with the computer program, or an identifier associated with a computer on which the computer program executes. However, Angelo discloses generating the computed value by applying a 1-way function to at least one of

a timestamp, an identifier associated with the computer program, or an identifier associated with a computer on which the computer program executes (col. 6, lines 28-44).

The same motivation that was utilized in the combination of claim 1 applies equally as well to claim 19.

22. As per claim 18, Banes discloses a computer program product wherein the key is associated with an administrator account for accessing the computer program (paragraphs, 0047).

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad w. Reza whose telephone number is 571-272-6590. The examiner can normally be reached on M-F (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOAZZAMI NASSER G can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad Wasim Reza

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11,23,07